Abstract of the Disclosure

Isolated and purified platelet voltage dependent calcium channel (VDCC) α_1 subunit polypeptides, and nucleic acid molecules encoding the same. Recombinant host cells, recombinant nucleic acids and recombinant proteins are also disclosed, 5 along with methods of producing each. Isolated and purified antibodies to platelet VDCC α_1 subunit polypeptides, and methods of producing the same, are also disclosed. Platelet VDCC α_1 subunit polypeptides have biological activity in calcium transport. Thus, therapeutic and diagnostic methods involving this activity are also disclosed.